

<110> Alnemri, Emad S.  
Fernandez-Alnemri, Teresa

<120> CASPASE-14, AN APOTOTIC PROTEASE, NUCLEIC ACID ENCODING  
AND METHODS OF USE

<130> 480140.434C1

<140> US 09/187,789

<141> 1998-11-06

<160> 78

&lt;170&gt; PatentIn Ver. 2.0

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Gly	Glu	Met	Val	Lys	Leu	Glu	Asn	Leu	Phe	Glu	Ala	Leu	Asn	Asn	Lys		
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Cys	Arg	Gly	Glu	Gln	Arg	Asp	Pro	Gly	Glu	Thr	Val	Gly	Gly	Asp	Glu		
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cat gat cag aaa ggc tca tgc ttt atc cag acc ctg gtg gat gtg ttc 633  
 His Asp Gln Lys Gly Ser Cys Phe Ile Gln Thr Leu Val Asp Val Phe  
 180 185 190 195

acg aag agg aaa gga cat atc ttg gaa ctt ctg aca gag gtg acc cgg 681  
 Thr Lys Arg Lys Gly His Ile Leu Glu Leu Leu Thr Glu Val Thr Arg  
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cgg atg gca gaa gca gag ctg gtt caa gaa gga aaa gca agg aaa acg 729  
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aac cct gaa atc caa agc acc ctc cgg aaa cgg ctg tat ctg cag 774  
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 Glu Ser Thr Met Lys Arg Asp Pro Thr Ala Glu Gln Phe Gln Glu Glu  
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 65 70 75 80  
 Cys Ala Phe Val Val Leu Met Ala His Gly Arg Glu Gly Phe Leu Lys  
 85 90 95  
 Gly Glu Asp Gly Glu Met Val Lys Leu Glu Asn Leu Phe Glu Ala Leu  
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 Ala Tyr Arg His Asp Gln Lys Gly Ser Cys Phe Ile Gln Thr Leu Val  
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Asp Ala Leu His Val Tyr Ser Thr Val Glu Gly Pro Thr Pro Phe Gln	
165 170 175	
gat ccc ctc tac cta ccc tct gaa gct ccc ccg aac cca cct ctc tgg	632
Asp Pro Leu Tyr Leu Pro Ser Glu Ala Pro Pro Asn Pro Pro Leu Trp	
180 185 190 195	
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Asn Ser Gln Asp Thr Ser Pro Thr Asp Met Ile Arg Lys Ala His Ala	
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Leu Ser Arg Pro Trp Trp Met Cys Ser Arg Arg Gly Lys Asp Ile Ser	
215 220 225	
tgg aac ttc tgacagaggt gacccggcgg atggcagaag cagagctggg	777
Trp Asn Phe	
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Glu Ser Thr Met Lys Arg Asp Pro Thr Ala Glu Gln Phe Gln Glu Glu	
50 55 60	
Leu Glu Lys Phe Gln Gln Ala Ile Asp Ser Arg Glu Asp Pro Val Ser	
65 70 75 80	
Cys Ala Phe Val Val Leu Met Ala His Gly Arg Glu Gly Phe Leu Lys	
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Gly Glu Asp Gly Glu Met Val Lys Leu Glu Asn Leu Phe Glu Ala Leu	
100 105 110	
Asn Asn Lys Asn Cys Gln Ala Leu Arg Ala Lys Pro Lys Val Tyr Ile	
115 120 125	
Ile Gln Ala Cys Arg Gly Glu Gln Arg Asp Pro Gly Glu Thr Val Gly	
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Glu	Val	Thr	Arg	Arg	Met	Ala	Glu	Ala	Glu	Leu	Val	Gln	Glu	Gly	Lys		
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Glu	Glu	Glu	Glu	Leu	Glu	Lys	Phe	Gln	Gln	Ala	Ile	Asp	Ser	Arg	Glu		
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Asp	Pro	Val	Ser	Cys	Ala	Phe	Val	Val	Leu	Met	Ala	His	Gly	Arg	Glu		
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Phe	Glu	Ala	Leu	Asn	Asn	Lys	Asn	Cys	Gln	Ala	Leu	Arg	Ala	Lys	Pro		
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Lys	Val	Tyr	Ile	Ile	Gln	Ala	Cys	Arg	Gly	Glu	Gln	Arg	Asp	Pro	Gly		
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Gln	Thr	Ile	Pro	Thr	Tyr	Thr	Asp	Ala	Leu	His	Val	Tyr	Ser	Thr	Val		
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Pro Ile Lys Glu Ala Asn  
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FOOT "E0668650

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Ser Leu Phe Ile Ser Lys Leu Ile Asp Cys Phe Lys Lys Tyr Cys Trp  
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Cys Tyr His Leu Glu Glu Ile Phe Arg Lys Val Gln His Ser Phe Glu  
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Val	Pro	Gly	Glu	Leu	Thr	Gln	Met	Pro	Thr	Ile	Glu	Arg	Val	Ser	Met
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Arg Val Leu Asn Gln Glu Glu Met Asp Lys Ile Lys Leu Ala Asn Ile  
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Thr Ala Met Asp Lys Ala Arg Asp Leu Cys Asp His Val Ser Lys Lys  
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Gly Pro Gln Ala Ser Gln Ile Phe Ile Thr Tyr Ile Cys Asn Glu Asp  
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Cys Tyr Leu Ala Gly Ile Leu Glu Leu Gln Ser Ala Pro Ser Ala Glu  
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 35 40 45

Leu Phe Ile Glu Ser Leu Ile Lys His Met Lys Glu Tyr Ala Trp Ser  
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Cys Asp Leu Glu Asp Ile Phe Arg Lys Val Arg Phe Ser Phe Glu Gln  
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<400> 28  
 Thr Gly Met Ser Ser Arg Ser Gly Thr Asp Val Asp Ala Ala Asn Leu  
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 Arg Glu Thr Phe Met Gly Leu Lys Tyr Cys Val Arg Asn Lys Asn Asp  
                   20                  25                  30  
 Leu Thr Arg Glu Asp Ile Leu Glu Leu Met Asp Ser Val Ser Lys  
                   35                  40                  45

<210> 29  
 <211> 28  
 <212> PRT  
 <213> Mus musculus

<400> 29  
 Glu Asp His Ser Lys Arg Ser Ser Phe Val Cys Val Ile Leu Ser His  
           1                  5                  10                  15  
 Gly Asp Glu Gly Val Ile Tyr Gly Thr Asn Gly Pro  
                   20                  25

<210> 30  
 <211> 39  
 <212> PRT  
 <213> Mus musculus

<400> 30  
 Val Glu Leu Lys Lys Leu Thr Ser Phe Phe Arg Gly Asp Tyr Cys Arg  
           1                  5                  10                  15  
 Ser Leu Thr Gly Lys Pro Lys Leu Phe Ile Ile Gln Ala Cys Arg Gly  
                   20                  25                  30  
 Thr Glu Leu Asp Cys Gly Ile  
                   35

<210> 31  
 <211> 4  
 <212> PRT  
 <213> Mus musculus

<400> 31  
 Glu Thr Asp Ser  
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<210> 32  
 <211> 7  
 <212> PRT  
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<400> 32  
 Thr Asp Glu Glu Met Ala Cys  
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<210> 33  
 <211> 42  
 <212> PRT  
 <213> Mus musculus

<400> 33  
 Gln Lys Ile Pro Val Glu Ala Asp Phe Leu Tyr Ala Tyr Ser Thr Ala  
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Pro Gly Tyr Tyr Ser Trp Arg Asn Ser Lys Asp Gly Ser Trp Phe Ile  
 20 25 30

Gln Ser Leu Cys Ser Met Leu Lys Leu Tyr  
 35 40

<210> 34  
 <211> 51  
 <212> PRT  
 <213> Mus musculus

<400> 34  
 Ala His Lys Leu Glu Phe Met His Ile Leu Thr Arg Val Asn Arg Lys  
 1 5 10 15

Val Ala Thr Glu Phe Glu Ser Phe Ser Leu Asp Ser Thr Phe His Ala  
 20 25 30

Lys Lys Gln Ile Pro Cys Ile Val Ser Met Leu Thr Lys Glu Leu Tyr  
 35 40 45

Phe Tyr His  
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<210> 35  
 <211> 81  
 <212> PRT  
 <213> Mus musculus

<400> 35  
 Met Thr Asp Asp Gln Asp Cys Ala Ala Glu Leu Glu Lys Val Asp Ser  
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Ser Ser Glu Asp Gly Val Asp Ala Lys Pro Asp Arg Ser Ser Ile Ile

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20

25

30

Ser Ser Ile Leu Leu Lys Lys Lys Arg Asn Ala Ser Ala Gly Pro Val  
 35 40 45

Arg Thr Gly Arg Asp Arg Val Pro Thr Tyr Leu Tyr Arg Met Asp Phe  
 50 55 60

Gln Lys Met Gly Lys Cys Ile Ile Ile Asn Asn Lys Asn Phe Asp Lys  
 65 70 75 80

Ala

<210> 36

<211> 47

<212> PRT

<213> Mus musculus

<400> 36

Thr Gly Met Asp Val Arg Asn Gly Thr Asp Lys Asp Ala Gly Ala Leu  
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Phe Lys Cys Phe Gln Asn Leu Gly Phe Glu Val Thr Val His Asn Asp  
 20 25 30

Cys Ser Cys Ala Lys Met Gln Asp Leu Leu Arg Lys Ala Ser Glu  
 35 40 45

<210> 37

<211> 28

<212> PRT

<213> Mus musculus

<400> 37

Glu Asp His Ser Asn Ser Ala Cys Phe Ala Cys Val Leu Leu Ser His  
 1 5 10 15

Gly Glu Glu Asp Leu Ile Tyr Gly Lys Asp Gly Val  
 20 25

<210> 38

<211> 39

<212> PRT

<213> Mus musculus

<400> 38

Thr Pro Ile Lys Asp Leu Thr Ala His Phe Arg Gly Asp Arg Cys Lys  
 1 5 10 15

Thr Leu Leu Glu Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Arg Gly  
 20 25 30

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Thr Glu Leu Asp Asp Gly Ile  
35

<210> 39  
<211> 4  
<212> PRT  
<213> Mus musculus

<400> 39  
Gln Ala Asp Ser  
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<210> 40  
<211> 52  
<212> PRT  
<213> Mus musculus

<400> 40  
Pro Ile Asn Asp Ile Asp Ala Asn Pro Arg Asn Lys Ile Pro Val Glu  
1 5 10 15

Ala Asp Phe Leu Phe Ala Tyr Ser Thr Val Pro Gly Tyr Tyr Ser Trp  
20 25 30

Arg Asn Pro Gly Lys Gly Ser Trp Phe Val Gln Ala Leu Cys Ser Ile  
35 40 45

Leu Asn Glu His  
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<210> 41  
<211> 51  
<212> PRT  
<213> Mus musculus

<400> 41  
Gly Lys Asp Leu Glu Ile Met Gln Ile Leu Thr Arg Val Asn Asp Arg  
1 5 10 15

Val Ala Arg His Phe Glu Ser Gln Ser Asp Asp Pro Arg Phe Asn Glu  
20 25 30

Lys Lys Gln Ile Pro Cys Met Val Ser Met Leu Thr Lys Glu Leu Tyr  
35 40 45

Phe Ser Arg  
50

<210> 42  
<211> 41

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&lt;212&gt; PRT

&lt;213&gt; Mus musculus

&lt;400&gt; 42

Met Thr Glu Thr Asp Gly Phe Tyr Lys Ser Arg Glu Val Phe Asp Pro  
 1 5 10 15

Ala Glu Gln Tyr Lys Met Asp His Lys Arg Arg Gly Val Ala Leu Ile  
 20 25 30

Phe Asn His Glu Arg Phe Phe Trp His  
 35 40

&lt;210&gt; 43

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; Mus musculus

&lt;400&gt; 43

Leu Thr Leu Pro Glu Arg Arg Gly Thr Asn Ala Asp Arg Asp Asn Leu  
 1 5 10 15

Thr Arg Arg Phe Ser Asp Leu Gly Phe Glu Val Lys Cys Phe Asn Asp  
 20 25 30

Leu Arg Ala Glu Glu Leu Leu Leu Lys Ile His Glu Val Ser Thr  
 35 40 45

&lt;210&gt; 44

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Mus musculus

&lt;400&gt; 44

Ser Ser His Ile Asp Ala Asp Cys Phe Ile Cys Val Phe Leu Ser His  
 1 5 10 15

Gly Glu Gly Asn His Val Tyr Ala Tyr Asp Ala Lys  
 20 25

&lt;210&gt; 45

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Mus musculus

&lt;400&gt; 45

Ile Glu Ile Gln Thr Leu Thr Gly Leu Phe Lys Gly Asp Lys Cys Gln  
 1 5 10 15

Ser Leu Val Gly Lys Pro Lys Ile Phe Ile Ile Gln Ala Cys Arg Gly  
 20 25 30

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Ser Gln His Asp Val Pro Val Val Pro Leu Asp Met Val Asp His Gln  
 35 40 45

Thr Asp Lys  
 50

<210> 46  
 <211> 52  
 <212> PRT  
 <213> Mus musculus

<400> 46  
 Asn Val Thr Gln Val Asp Ala Ala Ser Val Tyr Thr Leu Pro Ala Gly  
 1 5 10 15

Ala Asp Phe Leu Met Cys Tyr Ser Val Ala Glu Gly Tyr Tyr Ser His  
 20 25 30

Arg Glu Thr Val Asn Gly Ser Trp Tyr Ile Gln Asp Leu Cys Glu Met  
 35 40 45

Leu Ala Arg Tyr  
 50

<210> 47  
 <211> 55  
 <212> PRT  
 <213> Mus musculus

<400> 47  
 Gly Ser Ser Leu Glu Phe Thr Glu Leu Leu Thr Leu Val Asn Arg Lys  
 1 5 10 15

Val Ser Gln Arg Arg Val Asp Phe Cys Lys Asp Pro Asp Ala Ile Gly  
 20 25 30

Lys Lys Gln Val Pro Cys Phe Ala Ser Met Leu Thr Lys Lys Leu His  
 35 40 45

Phe Cys Pro Lys Pro Ser Lys  
 50 55

<210> 48  
 <211> 250  
 <212> PRT  
 <213> Mus musculus

<400> 48  
 Met Asp Phe Gln Ser Cys Leu Asp Ala Ile Ala Glu Glu Leu Gly Ser  
 1 5 10 15

Glu Asp Leu Ala Ala Leu Lys Phe Leu Cys Leu Asp Tyr Ile Pro His

FOOTNOTES: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

30

Asp Cys Asp Lys Glu Ala Leu Ser Lys Thr Phe Lys Glu Leu His Phe

[illegible]

20

25

30

Glu Ile Val Ser Tyr Asp Asp Cys Thr Ala Asn Glu Ile His Glu Ile  
 35 40 45

Leu Glu Gly Tyr Gln Ser  
 50

&lt;210&gt; 50

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Mus musculus

&lt;400&gt; 50

Ala Asp His Lys Asn Lys Asp Cys Phe Ile Cys Cys Ile Leu Ser His  
 1 5 10 15

Gly Asp Lys Gly Val Val Tyr Gly Thr Asp Gly Lys  
 20 25

&lt;210&gt; 51

&lt;211&gt; 52

&lt;212&gt; PRT

&lt;213&gt; Mus musculus

&lt;400&gt; 51

Glu Ala Ser Ile Tyr Asp Leu Thr Ser Tyr Phe Thr Gly Ser Lys Cys  
 1 5 10 15

Pro Ser Leu Ser Gly Lys Pro Lys Ile Phe Phe Ile Gln Ala Cys Arg  
 20 25 30

Gly Ser Asn Phe Gln Lys Gly Val Pro Asp Glu Ala Gly Phe Glu Gln  
 35 40 45

Gln Asn His Thr  
 50

&lt;210&gt; 52

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; Mus musculus

&lt;400&gt; 52

Ser Ser His Lys Asn Tyr Ile Pro Asp Glu Ala Asp Phe Leu Leu Gly  
 1 5 10 15

Met Ala Thr Val Leu Met Cys Val Ser Tyr Arg Asp Pro Val Asn Gly  
 20 25 30

Thr Trp Tyr Ile Gln Ser Leu Cys Gln Ser Leu Arg Glu Arg Cys  
 35 40 45

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<210> 53  
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 <212> PRT  
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<400> 53  
 Pro Gln Gly Asp Asp Ile Leu Ser Ile Leu Thr Gly Val Asn Tyr Asp  
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 Val Ser Asn

<210> 54  
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 <212> PRT  
 <213> Mus musculus

<400> 54  
 Lys Asp Asp Arg Arg Asn Lys Gly Lys Gln Met Pro Gln Pro Thr Phe  
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 Thr Leu Arg Lys Lys Leu  
                           20

<210> 55  
 <211> 260  
 <212> PRT  
 <213> Mus musculus

<400> 55  
 Met Ala Ala Pro Ser Gly Arg Ser Gln Ser Ser Leu His Arg Lys Gly  
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 Leu Met Ala Ala Asp Arg Arg Ser Arg Ile Leu Ala Val Cys Gly Met  
                           20                          25                          30  
 His Pro Asp His Gln Glu Thr Leu Lys Lys Asn Arg Val Val Leu Ala  
                   35                          40                          45  
 Lys Gln Leu Leu Leu Ser Glu Leu Leu Glu His Leu Leu Glu Lys Asp  
           50                          55                          60  
 Ile Ile Thr Leu Glu Met Arg Glu Leu Ile Gln Ala Lys Gly Gly Ser  
           65                          70                          75                          80  
 Phe Ser Gln Asn Val Glu Leu Leu Asn Leu Leu Pro Lys Arg Gly Pro  
                           85                          90                          95  
 Gln Ala Phe Asp Ala Phe Cys Glu Ala Leu Arg Glu Thr Arg Gln Gly  
                   100                          105                          110

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His Leu Glu Asp Leu Leu Leu Thr Thr Leu Ser Asp Ile Gln His Val  
 115 120 125

Leu Pro Pro Leu Ser Cys Asp Tyr Asp Thr Ser Leu Pro Phe Ser Val  
 130 135 140

Cys Glu Ser Cys Pro Pro His Lys Gln Leu Arg Leu Ser Thr Asp Ala  
 145 150 155 160

Thr Glu His Ser Leu Asp Asn Gly Asp Gly Pro Pro Cys Leu Leu Val  
 165 170 175

Lys Pro Cys Thr Pro Glu Phe Tyr Gln Ala His Tyr Gln Leu Ala Tyr  
 180 185 190

Arg Leu Gln Ser Gln Pro Arg Gly Leu Ala Leu Val Leu Ser Asn Val  
 195 200 205

His Phe Thr Gly Glu Lys Asp Leu Glu Phe Arg Ser Gly Gly Asp Val  
 210 215 220

Asp His Thr Thr Leu Val Thr Leu Phe Lys Leu Leu Gly Tyr Asn Val  
 225 230 235 240

His Val Leu His Asp Gln Thr Ala Gln Glu Met Gln Glu Lys Leu Gln  
 245 250 255

Asn Phe Ala Gln  
 260

<210> 56  
 <211> 11  
 <212> PRT  
 <213> Mus musculus

<400> 56  
 Leu Pro Ala His Arg Val Thr Asp Ser Val Cys  
 1 5 10

<210> 57  
 <211> 18  
 <212> PRT  
 <213> Mus musculus

<400> 57  
 Val Ala Leu Leu Ser His Gly Val Glu Gly Gly Ile Tyr Gly Val Asp  
 1 5 10 15

Gly Lys

<210> 58

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<400> 58

Pro Ser Leu Gln Asn Lys Pro Lys Met Phe Phe Ile Gln Ala Cys Arg  
20 25 30

Thr Gln Ser Pro Gly Cys Glu Glu  
50 55

<211> 53

<213> Mus musculus

<400> 59

Ser Asp Met Ile Cys Gly Tyr Ala Cys Leu Lys Gly Asn Ala Ala Met  
20 25 30

Arg Asn Thr Lys Arg Gly Ser Trp Tyr Ile Glu Ala Leu Thr Gln Val  
35 40 45

Phe Ser Glu Arg Ala  
50

<211> 18

<213> Mus musculus

<400> 60

Glu Arg

<211> 35

<213> Mus musculus

059503-11003

&lt;400&gt; 61

Glu Gly Tyr Ala Pro Gly Thr Glu Phe His Arg Cys Lys Glu Met Ser  
 1 5 10 15

Glu Tyr Cys Ser Thr Leu Cys Gln Gln Leu Tyr Leu Phe Pro Gly Tyr  
 20 25 30

Pro Pro Thr  
 35

&lt;210&gt; 62

&lt;211&gt; 31

&lt;212&gt; PRT

&lt;213&gt; Mus musculus

&lt;400&gt; 62

Met Glu Ser Glu Met Ser Asp Pro Gln Pro Leu Gln Glu Glu Arg Tyr  
 1 5 10 15

Asp Met Ser Gly Ala Arg Leu Ala Leu Thr Leu Cys Val Thr Lys  
 20 25 30

&lt;210&gt; 63

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; Mus musculus

&lt;400&gt; 63

Ala Arg Glu Gly Ser Glu Val Asp Met Glu Ala Leu Glu Arg Met Phe  
 1 5 10 15

Arg Tyr Leu Lys Phe Glu Ser Thr Met Lys Arg Asp Pro Thr Ala Gln  
 20 25 30

Gln Phe Leu Glu Glu Leu Asp Glu Phe Gln Gln Thr Ile Asp Asn Trp  
 35 40 45

Glu Glu Pro Val Ser Cys Ala Phe Val Val Leu Met Ala His Gly Glu  
 50 55 60

Glu Gly Leu Leu Lys Gly Glu Asp Glu Lys  
 65 70

&lt;210&gt; 64

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; Mus musculus

&lt;400&gt; 64

Met Val Arg Leu Glu Asp Leu Phe Glu Val Leu Asn Asn Lys Asn Cys  
 1 5 10 15

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Lys Ala Leu Arg Gly Lys Pro Lys Val Tyr Ile Ile Gln Ala Cys Arg  
                     20                    25                    30

Gly Glu His Arg Asp Pro Gly Glu Glu Leu Arg Gly Asn Glu Glu Leu  
                     35                    40                    45

Gly Gly Asp Glu Glu Leu Gly Gly  
           50                    55

<210> 65

<211> 53

<212> PRT

<213> Mus musculus

<400> 65

Asp Glu Val Ala Val Leu Lys Asn Asn Pro Gln Ser Ile Pro Thr Tyr  
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Thr Asp Thr Leu His Ile Tyr Ser Thr Val Glu Gly Tyr Leu Ser Tyr  
                     20                    25                    30

Arg His Asp Glu Lys Gly Ser Gly Phe Ile Gln Thr Leu Thr Asp Val  
                     35                    40                    45

Phe Ile His Lys Lys  
           50

<210> 66

<211> 15

<212> PRT

<213> Mus musculus

<400> 66

Ile Leu Glu Leu Thr Glu Glu Ile Thr Arg Leu Met Ala Asn Thr  
       1                    5                    10                    15

<210> 67

<211> 8

<212> PRT

<213> Mus musculus

<400> 67

Glu Val Met Gln Glu Gly Lys Pro  
       1                    5

<210> 68

<211> 17

<212> PRT

<213> Mus musculus

<400> 68

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Arg Lys Val Asn Pro Glu Val Gln Ser Thr Leu Arg Lys Lys Leu Tyr  
1 5 10 15

Gln

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<210> 69
<211> 21
<212> DNA
<213> Artificial Sequence
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<220>  
<223> Primer derived from mouse caspase-14 cDNA

<400> 69  
 atatgatatg tcaggtgccc g 21

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<210> 70
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<212> DNA
<213> Artificial Sequence
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<220>  
<223> Primer derived from mouse caspase-14 cDNA

<400> 70  
 ttccggagggg tgctttgga 19

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<210> 71
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<212> DNA
<213> Artificial Sequence
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<220>  
<223> Primer derived from human caspase-14 cDNA

<400> 71  
cctgtatgat gtacaccttg g 21

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<210> 72
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<212> DNA
<213> Artificial Sequence
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<223> Primer derived from human caspase-14 cDNA

<400> 72  
agagattctc cagcttgac 19

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<210> 73
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<212> DNA
<213> Artificial Sequence
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<210> 77

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**1**

5

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